

REMARKS/ARGUMENTS

Claims 1, 11, 28 and 35 have been amended not to overcome any rejection but only to clarify the claimed subject matter. Claims 40-43 have been added. Claims 1-43 are pending in the application.

Claim Rejections

Claims 1-39 stand rejected under 35 U.S.C. 102(e) as being anticipated by Walker et al. (USPN 6,138,171) (hereinafter "Walker").

As amended, Claim 1 recites:

A method comprising:
receiving a plurality of events;
applying the plurality of events to a correlation function, wherein the correlation function is implemented as a state machine and is configured to correlate the plurality of events; and
generating a specific event if the correlation function is satisfied by the plurality of events.

Thus, a specific event is generated if a correlation function configured to correlate events is satisfied by the received events. Walker does not describe applying events to a correlation function or generating a specific event, as recited in Claim 1. Instead, Walker describes:

A generic software state machine (10) for implementing a software application in an object oriented environment includes a set of entity objects (20,30) defined for software elements of the software application, a set of state objects (26,34,38,40) defined for each entity object representative of states that the software element may enter, and a set of event objects (36,42) defined for each state object representative of inputs that the software element may receive or actions that the software element

may encounter while in the state represented by the state object. (Walker, Abstract; FIG. 1, 2, and 3)

Accordingly, Walker merely discloses a generic software state machine that includes entity objects, state objects, and event objects. However, Walker fails to disclose a correlation function or generating a specific event based on whether the correlation function is satisfied.

The Office Action argues that the “FsmInstance” (finite state machine instance) object class described in Walker corresponds to the correlation function recited in Claim 1. (Office Action, section 2, page 2). Although “FsmInstance” is a state machine, nothing in Walker discloses or suggests that “FsmInstance” is configured to correlate events. Thus, “FsmInstance” does not correspond to the correlation function in Claim 1.

The Office Action also argues that Walker discloses communication between state machines. However, in Claim 1, “generating a specific event” is performed under the condition “if the correlation function is satisfied by the plurality of events”. The communication described in Walker does not include such a condition.

For at least the reasons stated above, Applicant respectfully submits that Claim 1 is not anticipated by Walker and is allowable. Given that Claims 2-10 depend from Claim 1, Claims 2-10 are also allowable for at least the same reasons.

As amended, Claim 11 recites:

A method comprising:
receiving a plurality of events;
receiving a plurality of data elements;

identifying a plurality of correlation functions configured to correlate the plurality of events and the plurality of data elements;
applying the plurality of events and the plurality of data elements to the plurality of correlation functions; and
generating a specific event if at least one of the plurality of correlation functions is satisfied.

In particular, the method in Claim 1 includes “identifying a plurality of correlation functions configured to correlate the plurality of events and the plurality of data elements”. As discussed above, Walker does not disclose a correlation function configured to correlate events. Thus, Walker also fails to disclose correlation functions that are configured to correlate both events and data elements, as recited in Claim 11.

The Office Action argues that events in Claim 11 correspond to the messages in Walker and the data elements in the claim correspond to state identifier and symbolic message identifier of messages. (Office Action, section 2, page 4). Nothing in Walker discloses or suggests that these identifiers correspond to the data elements in Claim 1. Furthermore, none of these identifiers is correlated to the messages in Walker by a correlation function.

For at least the reasons stated above, Applicant respectfully submits that Claim 11 is not anticipated by Walker and is allowable. Given that Claims 12-19 depend from Claim 11, Claims 12-19 are also allowable for at least the same reasons.

Claim 20 recites:

A method comprising:
identifying a schema for creating state machines, the state machines to correlate at least two events;
creating an instance of a particular state machine;

defining transitions for the particular state machine by subscribing to at least one event; and
applying an update consumer to the particular state machine to update the state of the particular state machine.

Specifically, Claim 20 includes “identifying a schema for creating state machines, the state machines to correlate at least two events”. As discussed above, Walker does not disclose a correlation function configured to correlate events where the correlation function is implemented as a state machine. Thus, Walker also fails to disclose identifying a scheme for creating such a state machine.

The Office Action argues that the schema in Claim 20 corresponds to the configuration file in Walker. In this regard, Walker states:

The configuration file specifies and defines a set of top level objects which need to be created by a Factory object 52 at the request of Foreman 50. Foreman 50 retrieves MainConfig file 53 from a file system or database 54 and passes the contents of the configuration file to Factory 52. Each object specified in the configuration file may have an associated configuration file or files which further specify how the objects should be constructed. (Walker, col. 8, lines 14-21)

Thus, Walker describes configuration files, not schemas. Also, the configuration files in Walker are used to create objects, not to create state machines that correlate events.

Claim 20 also includes “applying an update consumer to the particular state machine to update the state of the particular state machine”. The Office Action argues that this element corresponds to a programmer modifying the initialization files in Walker. (Office Action, section 2, page 6). The update consumer in Claim

20 is a logical component that updates the state of the particular state machine by applying the update consumer to the state machine. Thus, the programmer described by the Office Action does not correspond to the update consumer as recited in Claim 20.

For at least the reasons stated above, Applicant respectfully submits that Claim 20 is not anticipated by Walker and is allowable. Given that Claims 21-27 depend from Claim 20, Claims 21-27 are also allowable for at least the same reasons.

As amended, Claim 28 recites:

An apparatus comprising:
a plurality of event consumers; and
an event correlator coupled to the plurality of event consumers, the event correlator to receive events from at least one event source and to receive data elements from at least one data source, the event correlator further to receive at least one correlation function configured to correlate events and data elements and to apply the received events and the received data elements to the correlation function, wherein the event correlator generates a specific event if the received events and the received data satisfy the correlation function.

In particular, the apparatus of Claim 28 includes an event correlator “to receive at least one correlation function configured to correlate events and data elements. As discussed above, Walker does not disclose such a correlation function. Accordingly, Walker fails to disclose an event correlator that correlates events. Thus, Applicant respectfully submits that Claim 28 is not anticipated by Walker and is allowable for at least the reasons stated above. Given that Claims 29-34 depend from Claim 28, Claims 29-34 are also allowable for at least the same reasons.

As amended, Claim 35 recites:

One or more computer-readable media having stored thereon a computer program that, when executed by one or more processors, causes the one or more processors to:

receive a plurality of events;

identify a plurality of correlation functions configured to correlate the plurality of events;

apply the plurality of events to the plurality of correlation functions to determine whether any of the plurality of correlation functions are satisfied by the plurality of events; and

generate a specific event if one of the plurality of correlation functions is satisfied by the plurality of events.

Specifically, the computer-readable media of Claim 35 causes a processor to “identify a plurality of correlation functions configured to correlate the plurality of events”. As discussed above, Walker does not disclose a correlation function configured to correlate events. Thus, for at least the reasons stated above, Applicant respectfully submits that Claim 35 is not anticipated by Walker and is allowable. Given that Claims 36-39 depend from Claim 35, Claims 36-39 are also allowable for at least the same reasons.

New Claims

New Claims 40-43 are added herein. Applicant respectfully submits that Claims 40-43 are allowable for at least the reasons discussed above.

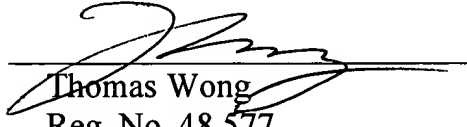
Conclusion

Claims 1-43 are in condition for allowance. Applicant respectfully requests the issuance of the subject application. Should any matter in this case remain

unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

Date: 3/31/2004

By: 
Thomas Wong
Reg. No. 48,577
(206) 315- 4001 X106